

**Summary
Of the
Platte River Cooperative Agreement
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On July 1, 1997, Nebraska, Colorado, Wyoming and the United States Department of the Interior entered into a partnership to develop a basin-wide recovery “program” for four species that have been listed as threatened or endangered under the federal Endangered Species Act (ESA). That program is being formulated pursuant to what is commonly called the Platte River Cooperative Agreement (C.A). The basinwide recovery program being developed has as its primary purpose the provision of recovery oriented Central Platte habitat for the whooping crane, piping plover and the interior least tern. The pallid sturgeon, which uses the Platte only near its mouth, is also a target species for the proposed program.

A ten-member governing body call the Governance Committee (GC) has been responsible for the activities undertaken to date and would be responsible in the future if the program is actually implemented. The GC includes representatives from the U.S. Fish and Wildlife Service (USFWS), the U.S. Bureau of Reclamation, each of the three states, water users from three geographic areas in the Platte River Basin, and environmental organizations. Dale Strickland of West Inc., is the Executive Director for the current effort.

The proposed program would take a phased, adaptive management approach. Assuming the cooperating partners agree to the terms of the program, the first increment is expected to be 13 years in length. It would have four primary components; the Water Action Plan (WAP), New Depletion Plans from each of the three states, a Habitat Plan, and an Integrated Monitoring and Research Plan; the first three are described in more detail below.

Water Action Plan (WAP)

Water goals for the program relate to “target flows”, which have been identified by the USFWS. Those “target flows” include the “species” and “annual pulse” flows the USFWS believes are needed to provide adequate habitat for the endangered species in the Central Platte. Actual daily flows often fall short of those target flows, especially at certain times of the year. When historic post-development flows on days of shortage are compared to the target flows, the average annual shortage totals approximately 417,000 acre feet (af). There is substantial disagreement among scientists about whether the identified target flows are biologically or hydrologically necessary or even beneficial to the habitat and/or recovery of the species. That disagreement has taken many forms. For example, the USFWS target flows are significantly different from the instream flow appropriations granted in 1998 by the Nebraska Department of Water Resources (now the Department of Natural Resources) for threatened and endangered and other species. For a comparison of those two flow regimes, [click here.](#) While the USFWS continues to believe its target flows are the right ones for recovery of the species, representative of the USFWS have also stated they are willing to review and possibly revise those flows as better science becomes available.

In the meantime, incremental reductions in shortages to the USFWS target flows would be sought if a program is initiated. The goal during the first increment of the proposed program would be to reduce current shortages to the target flows at Grand Island by an average of 130,000 to 150,000 af per year. Three projects already being implemented or planned by the three States would produce an estimated 80,000 af per year. The first project is an “environmental account” (EA) in Lake McConaughy, where 10% of the storable inflows between October and April are stored so they can be later released to reduce shortages to target flows. No more than 100,000 af can be added to the EA storage in any one storage season and no more than 200,000 af can be stored in the account at any one time. Decisions on the release of water from the EA are made by the USFWS. Since its creation in 1999, the EA has been used to improve flows in the central Platte River throughout much of the summers of 2000, 2001 and 2002.

The second project is an enlargement of Pathfinder Reservoir in Wyoming. Water from that project would be managed much like the environmental account in Lake McConaughy is managed. That project is still in the planning stage, but if implemented would provide 34,000 af in storage capacity for the program.

The third project is the Tamarack Project in Colorado. That project, which is expected to yield an average of about 10,000 af in the habitat area, would take water out of the river during times of excess flows (most often during the winter months) and temporarily store it in shallow alluvial aquifers where it would naturally return to the river at times when flow shortages are more likely. Tamarack is under construction and currently is partially operational.

The additional 50,000 to 70,000 af necessary to realize the shortage reduction goal of 130,000 to 150,000 af for the first increment would be obtained through other projects. Those projects would be implemented throughout the basin, would have to be acceptable to the states, and would be implemented throughout the first increment of the program.

A Reconnaissance Level Water Action Plan that lists the projects now proposed was completed in September, 2000, and would be revised as necessary when new information became available. Eight of the thirteen projects in the current Water Action Plan would be in Nebraska, four would be in Wyoming and one would be in Colorado. The proposed projects include storage and reregulation reservoirs, groundwater recharge/return projects (like the Colorado Tamarack project), leasing of water rights, power interference (paying hydropower generators to delay release of water until the water released would reduce shortages to target flows) and others. The current estimated cost to construct and operate those projects during the first 13 year increment of the program ranges from about \$45 million to \$65 million.

Inclusion of a project in the WAP at this time does not mean that decisions have been made to implement that project. It simply means that, if a program is actually begun, that project is likely to be advanced to the feasibility level of study to undergo further analysis (i.e. engineering studies, economic and social impact studies, etc.). Project revisions and substitutions are likely before the list of projects to be implemented is finalized. Computer models being developed as part of a comprehensive Nebraska Cooperative Hydrology Study (COHYST) will, when completed, help Nebraska and the other parties assess the hydrologic impacts of some of the projects proposed.

The primary purpose of the Water Action Plan is to provide improved flows for the three avian species that are found in the Central Platte area, i.e. the whooping crane, the piping plover, and the least tern. As noted in the first paragraph, the pallid sturgeon is also a target species for the proposed program. It is hoped that providing improved flows for the avian species in the

Central Platte area will also prove to be of benefit to the pallid sturgeon in the lower Platte. For now it is uncertain whether the proposed program, at some time, would include any other measures specifically intended to aid sturgeon recovery. However, during the program's first increment, research relating to the sturgeon's habitat requirements would be likely. The results of that research would be used to decide what else, if anything, could and should be done for the sturgeon in subsequent program increments.

New Depletion Plans

While the Water Action Plan is designed to improve flows in the Central at times when target flow shortages would otherwise occur, each state's New Depletion Plan will be designed to prevent an increase in shortages to target flows because of new or expanded uses of water begun on or after July 1, 1997. New uses that contribute to target flow shortages would be subject to mitigation, either with water or with dollars that could be used to produce water. The plans proposed by Wyoming and Colorado are not summarized here, but Nebraska's August, 2002 draft New Depletion proposal, which is subject to change, is summarized as follows:

- Both the flows needed to prevent reduced supplies to holders of Nebraska water rights and the USFWS target flows would serve as the reference points for determining (1) periods of flow shortage, i.e. when new depletions would have to be offset, and (2) periods of flow excess, i.e. when water was available for retiming so it could serve as the required offset for new depletions during flow shortages.
- For new or expanded uses of groundwater or surface water begun between **July 1, 1997 and December 31, 2003**, the draft plan proposes that the State of Nebraska would determine the extent to which those increases in water use would cause new depletions to Nebraska water right flows and to USFWS target flows and would implement projects and programs as necessary to offset those new depletions when they occur. The models developed through the COHYST study would be used to determine the extent of new depletions caused by groundwater uses begun in that time period.
- For new or expanded uses of groundwater beginning **1-1-2004 or later**, a two step process would be used to offset any new depletion to target flows. First, those making a new or expanded use of groundwater would be responsible for offsetting new depletions to flows needed for then existing **Nebraska surface water rights including natural flow rights, storage rights and the Nebraska instream flow appropriations**. The draft plan proposes that the State of Nebraska would be responsible for the second step of the process, which would be to offset depletions to target flows caused by new or expanded uses of groundwater to the extent those depletions would not otherwise be offset by the offsets for depletions to surface water right flows. The COHYST models mentioned above would be used to provide much of the information necessary to complete both of those steps. To view the previously referenced comparison of the Nebraska instream flow appropriations and the USFWS target flows for the Central Platte River, [click here](#).
- Also beginning 1-1-2004, any new surface water appropriations would be subject to state imposed conditions to avoid or offset new depletions to flows needed by senior surface water rights including the instream flow appropriations. Providing offset water could be a way to overcome problems in satisfying the requirement that there must be "unappropriated water"

available for a new surface water right to be granted. As with groundwater, any new depletion to target flows not offset by the new user would be the responsibility of the state.

- Periodically, perhaps every 5 years starting on or around 2008, the state would conduct a new land use inventory to determine changes in irrigated acres, collect additional information as needed, use the COHYST models to determine the overall effects of changes in water use on flows, and assess the overall sufficiency of the combined offset measures to offset depletions to target flows. If more offset water was being provided collectively than was determined necessary through that assessment, credit for the offset of future new depletions would be available. If not enough offset water was being provided, the state would implement projects and programs as necessary to make up the deficiency.

Habitat Plan

Terrestrial habitat is also deemed necessary to meet the needs of the species. The proposed program would over time result in the development and protection of 29,000 acres of habitat between Lexington and Chapman. That long-term goal could change as a result of adaptive management as the program is implemented. The goal for the first increment of the proposed program would be to develop and/or protect at least 10,000 acres. NPPD's Cottonwood Ranch property located between Overton and Elm Creek (2,650 acres) would be dedicated to the program. That would leave an unmet first increment need of 7,350 acres. That habitat would be acquired from willing participants via leasing, conservation easements, and purchases. The initial focus would be placed on riverine and wet meadow type habitat that would or could form a "habitat complex." Some limited quantity of other types of habitat, such as sandpits, likely would also be acquired.

The current estimated cost of acquiring, developing and maintaining the 10,000 acres of land needed by the end of the first increment ranges from about \$20 million to about \$30 million depending upon how development would proceed. For example, the USFWS believes that further channel degradation is likely in the Platte unless additional sediments, especially fine grain sands, are made available to the stream. The Service proposes that habitat for the species would be improved by clearing some river islands that currently are heavily vegetated. At least some of those cleared islands would also be lowered so that, in theory, revegetation could be prevented by annual inundation of the islands with relatively low peak flows. The Service also proposes that in lowering those islands, the sand would be pushed into the river channel to increase the sand load, thereby reducing further channel incision and narrowing. That theory is controversial among the Cooperative Agreement parties and therefore would be tested on a small scale before island leveling/sediment augmentation became a major component of the program.

Another important element of the Habitat Plan, at least for the long term, is that the Platte River Whooping Crane Maintenance Trust, the Nebraska Game and Parks Commission, the Nature Conservancy, and the Audubon Society currently own several thousand acres of potentially eligible habitat. Eventually, those holdings are expected to contribute to meeting the 29,000 acre goal, but they will not count toward the 10,000 acre first increment goal.

Timeline and Future Decisions

While Nebraska believes it is important to complete formulation of the proposed recovery implementation program, no conclusions have been reached by Nebraska or by any of the other parties about whether the proposed program, once fully formulated, will be acceptable. Final decisions by all three states and by the Department of Interior are not expected until late 2003 at the earliest and each party likely will consider what it believes to be the advantages and disadvantages of the proposed program before it decides whether the program is in that party's best interests.

Need More Information?

If you would like more information about the Cooperative Agreement, the proposed Platte River Recovery Implementation Program or other issues referenced in this summary, please contact the Nebraska Department of Natural Resources at (402) 471-2363 or send an email message by clicking [here](#).